

Screaming Cup

Materials

- Large plastic cup
- Piece of string (24")
- Water
- Violin rosin (optional)



1. Start by poking a hole in the bottom of the cup just large enough to thread the piece of string.
2. Thread the string through the hole and tie a knot or two at the end of the string to hold the string in place.
3. Wet the string or coat the string with violin rosin.
4. Holding the cup in one hand, pinch the string between your thumb and forefinger. Squeeze tight on the string as you slide your thumb and forefinger down the string. With practice and a little patience, the string will "stick and slide" between your fingers causes a "screaming" sound. Oh, you'll know when you've got it down to a science!

How does it work?

Sound is transmitted through the air by vibrations. As your fingers slide across the string, vibrations occur in the string. The violin rosin makes the string more sticky and increases the "stick and slide" effect. The vibrations caused by "stick and slide" cause the cup to vibrate, which results in the amplification of sound. In other words, the cup produces an incredibly eerie scream! Try differently shaped cups and determine what this change does to the sound.